COVID-19 vaccines **differ significantly from other vaccines** with respect to storage and handling requirements. It is critical that all vaccine providers plan accordingly. Refer to the following best practices and guidance to prevent COVID19 Vaccine Wastage. For additional guidance, please refer to the Commonwealth of Virginia COVID-19 Accountability Transport, Redistribution, Transfer & Waste Document.

As a preface...

- 1. Make every effort to vaccinate each eligible person
- 2. It is acceptable to open a multi-use vial without a guarantee of using all doses contained, if it means vaccinating one or more eligible individuals
- 3. Follow <u>clinical best practice for vaccination as well as best practices when managing inventory</u> to maximize vaccination and minimize wastage
- 4. It is no longer imperative to use every dose the week it is received; rather, it is acceptable to have multiple weeks of inventory on hand as long as all manufacturer specifications for storage and handling are followed
- 5. For those holding open clinics, please be **flexible in accommodating sequential dose needs**. Try to schedule additional clinics to accommodate. If that is not possible, make sure the patient understands they **can receive sequential doses anywhere that offers that vaccine**. If they cannot find an appointment, refer them to <u>vaccinate.virginia.gov</u> or by calling 877-VAX-IN-VA.

Before the clinic...

- 1. You may use pre-registration system data to the fullest capacity to identify, prepare, and invite patients to your vaccination clinic
- 2. PrepMod, VAMS, and VASE+ can help facilities plan and set up clinics, control appointment times and determine the number of patients per appointment to allow for social distancing
- 3. Have a list of "stand-by" eligible recipients in place to contact to backfill for no-shows on short notice
- 4. If you have expiring doses complete this survey if help distributing vaccines is needed
- 5. Plan for how much vaccine you will need to thaw and/or reconstitute, depending on the number of appointments scheduled. **Do not take out and thaw the vials all at once**.

During the clinic...

1. Continuously communicate how many patients have arrived and how many are still expected to show up so doses can be prepared accordingly based on the actual number of patients.



- 2. Monitor vaccine to ensure it is consistently stored at the temperatures indicated by the manufacturer. Label vials with the "thawed on" and "discard by" dates and times. **Ensure relevant staff are provided with the following information**:
 - a. It is critical to monitor vaccine storage temperatures hourly when on site or to use a data logger to ensure vaccine stability and viability.
 - b. For Pfizer-BioNTech vaccines:

Description	Dilute Before Use	Do Not Dilute	Dilute Before Use
Ultra-Low-Temperature (ULT) Freezer [-90°C to -60°C (-130°F to -76°F)]	12 months [†]	12 months [‡]	12 months [‡]
Freezer [-25°C to -15°C (-13°F to 5°F)]	2 weeks	DO NOT STORE	DO NOT STORE
Refrigerator [2°C to 8°C (35°F to 46°F)]	1 month	10 weeks	10 weeks
Room Temperature [8°C to 25°C (46°F to 77°F)]	2 hours prior to dilution (including any thaw time)	12 hours prior to first puncture (including any thaw time)	12 hours prior to dilution (including any thaw time)
After First Puncture [2°C to 25°C (35°F to 77°F)]	Discard after 6 hours	Discard after 12 hours	Discard after 12 hours

- i. More information about Pfizer-BioNTech storage can be found here.
- c. For Moderna/Spikevax vaccine:
 - i. Unopened frozen vials may be stored in the freezer [-50°C to -15°C (-58°F to 5°F)] until the expiration date. Unopened thawed vials may be stored in the refrigerator [2° to 8°C (36° to 46°F)] for up to 30 days. Once a vial is punctured or at room temperature, the vaccine must be used within 12 hours. After a vial is punctured 20 times it should be discarded even if the 12 hour time limit has not been met.
 - ii. More information about Moderna/Spikevax storage can be found here.
- d. For Janssen (J&J) vaccine:
 - Vials will arrive refrigerated and may be stored in the refrigerator [2°C and 8°C (36°F and 46°F)] until its expiration date, so long as the vial has not been punctured.
 - ii. Punctured vials can be stored for up to 6 hours (refrigerated) or 2 hours (at room temperature).
 - iii. Do not freeze this vaccine
 - iv. More information about J&J storage can be found here.
- e. CDC's COVID-19 vaccine refrigerator temperature monitoring log can be found here.



- 3. Improper storage techniques can damage the vaccines, so compliance with the provider agreement and storage/handling training for all staff and volunteers is essential.
 - a. View VDH's <u>micro courses</u> on handling vaccines safely for quick videos (less than 5-minutes each) and resources about handling dry ice, monitoring vaccine temperature, and inventory and expiration dates.
 - b. Other helpful resources include <u>CDC's Vaccine Storage and Handling Toolkit</u> and the <u>U.S Pharmacopeia (USP) COVID-19 Vaccine Storage and Handling Toolkit</u>
- 4. **Do not** combine residual vaccine from multiple vials (of any manufacturer) to obtain a dose.

When there are extra doses at the clinic...

To prevent vaccine wastage and maintain public trust in the process, providers may often need to administer additional/extra/soon-to-expire doses to individuals not initially invited to a vaccination event. As soon as providers are aware that there are more doses than people to be vaccinated, "standby" eligible individuals should be called, or other steps must be taken to bring additional eligible recipients to the facility or clinic before the acceptable use period expires.

If you waste a dose of COVID-19 vaccine or a dose expires...

- 1. Report wastage and expiration using the Vaccine Wastage Reporting Tool
- 2. Expiration dates, along with other identifying factors such as lot number, should be tracked on the inventory management system and wasted or expired doses should be discarded according to your facility's policy

